

Big Lake WMA-South Side Addition



WILDLIFE HABITAT LAND PROJECT PROPOSAL

(vers. 5/2021)

1. **Region:** 5 **Regional Supervisor:** Mike Ruggles

Name of Applicant(s): Justin Paugh

2. **Date:** 6-1-2021

3. **Project Name:** Big Lake WMA South Side Addition. **Type of Project:** Fee Title

4. **Size:** Total acres proposed for purchase: ~114 acres. These acres consist of ~34 dryland acres and ~80 water/wetland acres. Sixty-two percent of the dryland acres (~21 acres) are on an island. The remaining 13 dryland acres are mainland shoreline.

No federal or state lease lands are included within the above listed parcels.

5. **Location:** Big Lake WMA is located in Stillwater County, about 23 miles northwest of Billings, Montana in FWP Region 5.

Map(s):

Figure 1. Big Lake Wildlife Management Area Vicinity Map

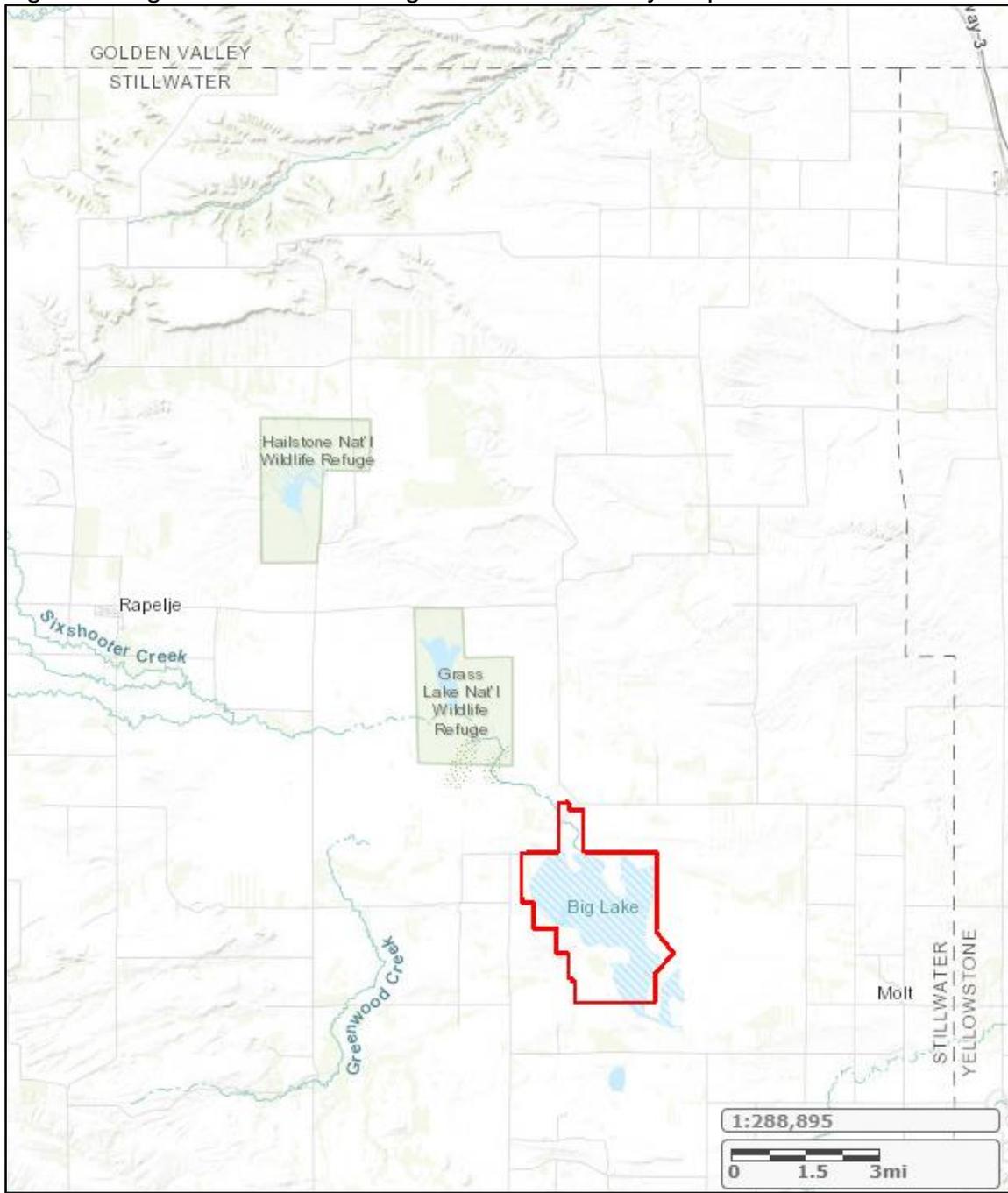


Figure 2. Big Lake WMA Boundary and Proposed South Side Addition

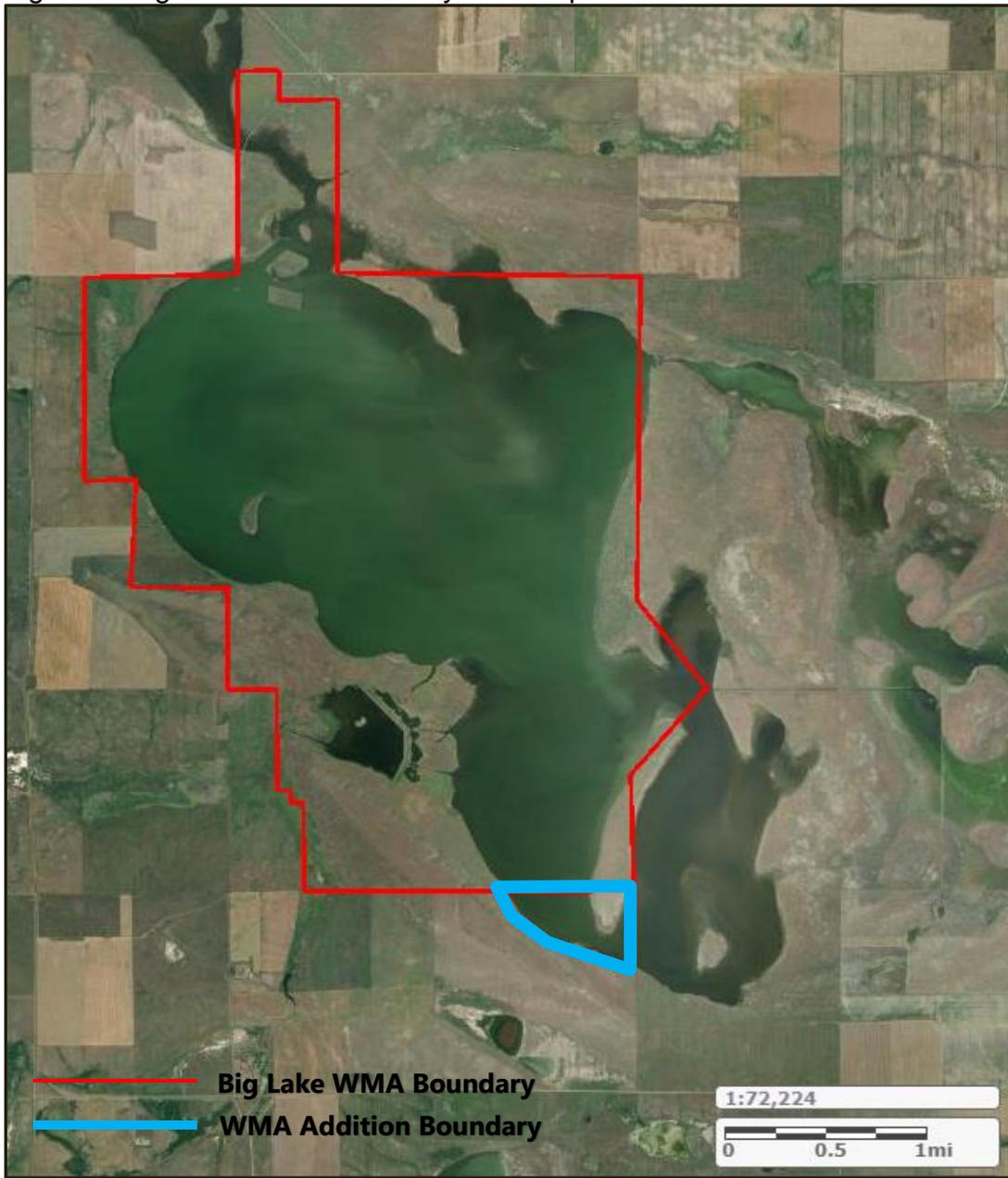
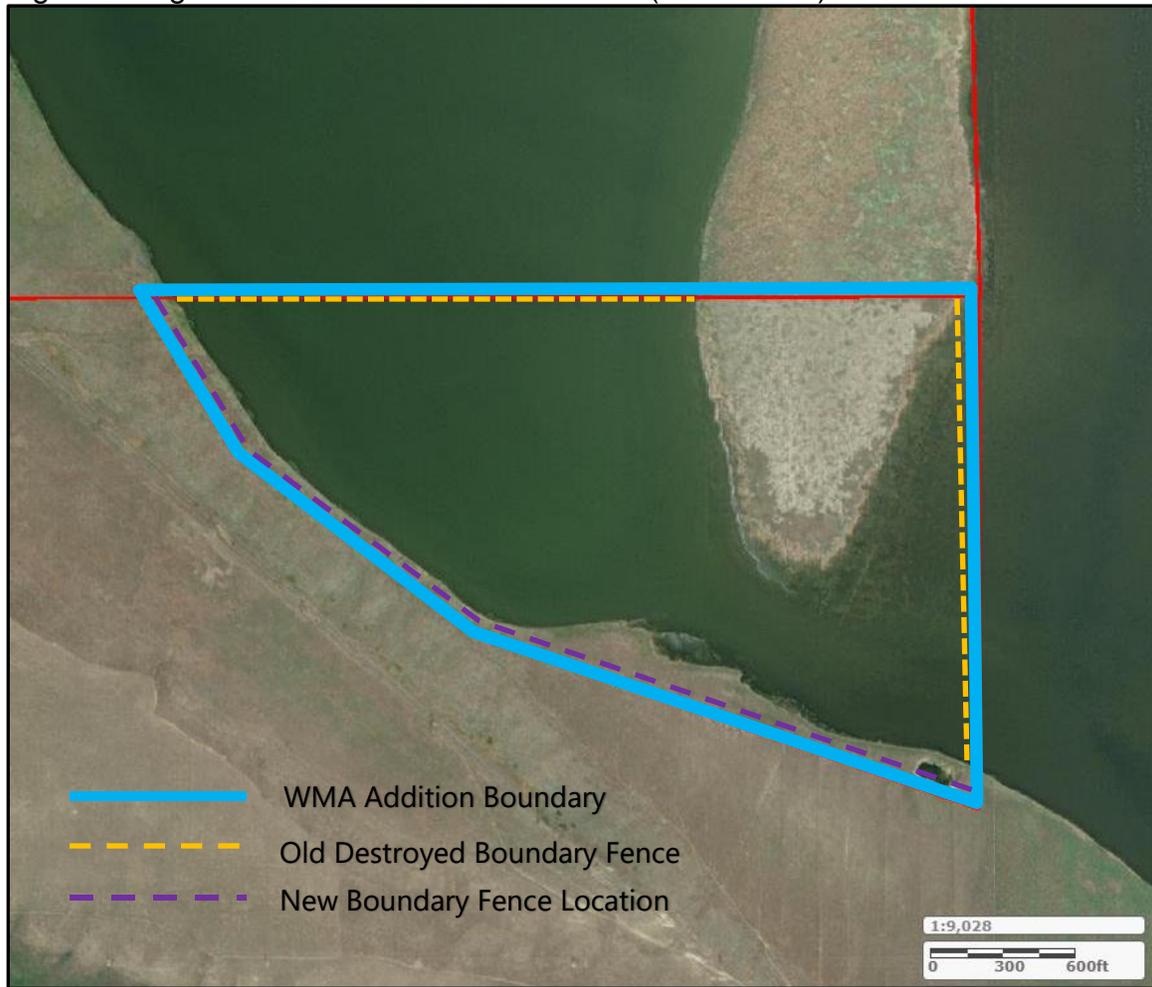


Figure 3. Big Lake WMA South Side Addition (~114 acres)



6. Project Need (Limit to 1,500 characters) – up to 10 pts.

Big Lake WMA is part of the Big Lake Wetland Complex in South Central Montana. The purpose of the WMA is to provide quality waterfowl nesting and migration staging habitat. Big Lake lies 18 miles north of the Yellowstone River and 23 miles northwest of Billings. The surrounding landscape is a fragmented patchwork of agricultural production, traditional grazing land, native grasslands, and scattered saline wetlands.

Currently Big Lake WMA consists of 3,086 acres owned by MT FWP. Within this land lies an additional 166 acres of BLM and 188 acres of State (DNRC) land. These lands surround an additional 1,347 acres of historical lakebed. This results in a total effective WMA size of 4,787 acres.

Acquisition of this parcel is critical to the long-term successful management of Big Lake WMA. Water levels and wetland extent fluctuate dramatically from year to year depending on local precipitation. The addition ensures livestock can be

effectively excluded from the WMA regardless of water level fluctuations. It provides for a permanent boundary fence on dry land, bringing stability for the landowner and FWP.

This unique prairie wetland habitat provides for a diverse assemblage of species, including waterfowl, shorebirds, upland birds, grassland birds, antelope, mule deer, prairie dogs, and other native species populations. The area is predicted to provide habitat for at least 11 "Species of Concern". Therefore, these habitats are beneficial in maintaining huntable and viewable populations of game and non-game species, both migratory and resident.

Proposed WMA addition shoreline and island



Waterfowl and Non-Game



Lake Basin shoreline habitat



WMA boundary fence destroyed by fluctuating water levels.



WMA boundary fence destroyed by fluctuating water levels.



7. Statewide Habitat Criteria – up to 10 pts.

- a) List all Community Types (SWAP 2015) comprising the property and their approximate percentage makeup. Please highlight Tier 1 types.

The property is composed of two Tier 1 Community Types. Approximately 80 acres are **Floodplain and Riparian**. The remaining ~34 acres are **Lowland/Prairie Grassland** community type.

- b) List estimated length of live stream courses or wetland/riparian/floodplain acres (if any).

The property contains approximately 80 acres of riparian/floodplain habitat. This provides 0.8 miles of mainland shoreline and 0.55 miles of island shoreline.

- c) Percentage of tillage cropland relative to the entire property acreage.

No tilled cropland exists on the property. The land is native riparian flood plain and prairie grassland habitat.

8. Project-Level Criteria

- a) **Site-Specific Wildlife Values – up to 10 pts.** The upland areas of Big Lake WMA and the proposed parcel are a mixture of native grasses, including western wheatgrass and needle-and-thread, along with a variety of nonnative grasses and forbs. The shrub component on drier sites is mainly silver sagebrush, with greasewood dominating wetter sites next to water. The greasewood provides tremendous nesting cover for several species of ducks, plus some passerine birds. Submergent aquatic vegetation in the lake is mainly sago pondweed, which is excellent forage for ducks, American coots, and swans, as well as providing a nesting substrate for eared grebes. The shallow wetlands provide large expanses of diverse aquatic forage creating critical stopover habitat for migrating waterfowl and shorebirds.
- b) **Threat Status: PICK ONE** (and provide brief explanation)
- **IMMINENT - 10 pts:** *the land is proposed for activity within five years which will cause irreversible impacts.*
 - **PROBABLE - 5 pts:** *strong trends in the vicinity of property have been toward conversion of the habitat (e.g., subdivision; cropland conversion), but no specific threat is underway.*
 - **POSSIBLE- 2 pts:** *sporadic occurrences for habitat conversion, which may happen to the property over time.*
 - **UNLIKELY – 0 pts**

Probable:

A change in ownership could result in the loss of FWP's ability to positively impact the habitat on this property as well as complicate/compromise management of the existing WMA. Recently there has been a trend away from traditional ranching and a shift toward purchasing land in this area for recreational purposes. Much of this land is floodplain riparian habitat. It is of little grazing or agriculture value to the landowner. However, it could be of high value to a recreation-oriented buyer. The landowner would like to sell the property. Their goal is to see this property transition into public ownership. However, they would likely sell to another entity if an offer was made. This parcel secures the southern lake shoreline in public ownership and allows for cattle exclusion from the WMA.

- c) **Focal Priority – up to 10 pts.**

Describe as follows:

- Does the proposal occur within a 2015 SWAP Tier I Focus Area? (7 pts) **Yes**, Terrestrial Focus Area Lake Basin Tier 1.
- Does the proposal occur within a 2015 SWAP Tier II Focus Area? (3 pts) **No**.

Is this proposal part of an ongoing multi-partner initiative? (3 pts) **Yes**. The Fish and Wildlife Service is in the process of purchasing approximately 3,000 acres adjacent to the east side of Big Lake WMA. When completed, this land will become a Waterfowl Production Area. Big Lake WMA, along with the

proposed purchase, and the Fish and Wildlife Service purchase, effectively secures the entire lake basin into perpetual public ownership.

Does the proposal support a species or multi-species conservation plan? (3 pts) **Yes.** Big Lake complex is identified in the Northern Great Plains Joint Venture Implementation Plan as an important grassland-alkaline wetland complex for shorebirds and waterfowl. This area is designated as an Audubon Important Bird Area.

d) Geographic Effectiveness – up to 10 pts.

The proposed purchase is adjacent to Big Lake WMA and secures public ownership of the lake basin shoreline. The purchase allows for effective cattle management by the landowner and FWP. Big Lake WMA, the purchase parcel, and the future Waterfowl Production Area would combine to create one contiguous block of habitat protection and recreation area totaling nearly 8,000 acres. In addition, Grass Lake National Wildlife Refuge (4,318 acres) and Hailstone National Wildlife Refuge (920 acres) lie within 8 miles of Big Lake WMA. Although small, the proposed purchase can be viewed as the capstone of a successful multi-agency, landscape scale conservation project.

e) Contribute to hunting and fishing opportunity and other recreation – up to 10 pts.

Over the past 26 years (1995-2021) Big Lake has had sufficient water to provide for moderate to incredible waterfowl production and migration staging in 17 years (65% of the time). Since the removal of Hailstone Dam in 2010, significant water has been present in Big Lake for 10 of the last 11 years. This suggests that the additional inflow may be enough to maintain Big Lake water levels throughout longer periods.

The proposed purchase is adjacent to Big Lake WMA. The WMA is publicly accessible via two access points along the northern boundary. The west access road provides a third access opportunity to the west side and southern part of the WMA.

Given the proximity to Billings and Columbus, the WMA provides excellent early season waterfowl hunting opportunities. Upland bird, and big game hunters seeking antelope and mule deer also find frequent success here. During spring and summer, the WMA is a popular area for local birders and birding groups. Recreationists enjoy the area from land or by using canoes and kayaks to traverse more remote parts of the WMA. Motorized watercraft are allowed for lawful hunting purposes.

Because of shallow waters and periodic wet/dry cycles the lake does not support fish or fishing opportunities.

f) **Management Considerations – 10 pts.**

The WMA addition would be managed under the existing Big Lake WMA management Plan. Plan components include annual weed control actions, road, fence, and sign maintenance. No cattle grazing occurs on the WMA and none is planned for the addition. No homes, barns, roads, or other structures are present. **The purchase will bring stability to a chaotic fencing scenario around fluctuating water levels. It will improve management efficiency and reduce long term maintenance cost and time obligations for FWP and the landowner.**